

## Abstracts

781

by age, i.e., children and adolescents (Group A: 5–19) and adults (Group B: 20+) and compared against an age matched control group (Group C) ( $n = 10,2$  million). Hospital admissions, outpatient clinic visits, total nursing days, average length of stay (ALOS), total hospital and specialist costs were analysed. Data for the Control group (C) were based on 2001. Data are presented as a three-year average or otherwise specified. **RESULTS:** The average number of hospital admissions and total nursing days were; 434(A), 455(B), and 3159(A), 3691(B) respectively. ALOS (days) were 7.3(A) and 5.3(C). In total there were 8696(A), 2680(B) outpatient clinic visits. Age matched controls for category (A) had 88,134 days. Males (MPH group) account for 78% of the total hospital admissions and 86% of outpatient clinic visits. Sixty percent of the outpatient visits in MPH category (A) occurred in age group 10–14, but 26% in age-matched controls. Total hospital costs were 2800 M€ (A), 2840 M€ (B) and 47,640 M€ (C) respectively. Specialist costs involved were 0.743 M€ (A), 0.344 M€ (B) and 7750 M€ for 5–19 years (C). For the MPH group 21% and 28% of these costs were attributed to patients aged 5–19 years. Nearly 80% of the specialist and hospital costs were dedicated to males. Average per patient hospital costs were 258€(A) and 176€(C). **CONCLUSIONS:** The data presented here show that ADHD patients have a substantial health care consumption and related health care costs.

## PMH17

**COST-UTILITY ANALYSIS OF MEDICAL CO-PRESCRIPTION OF HEROIN COMPARED WITH METHADONE MAINTENANCE TREATMENT FOR CHRONIC, TREATMENT RESISTANT HEROIN ADDICTS**

Dijkgraaf MGW<sup>1</sup>, Van der Zanden BP<sup>1</sup>, De Borgie CAJM<sup>1</sup>, Blanken P<sup>2</sup>, Van Ree JM<sup>2</sup>, Van den Brink W<sup>1</sup>

<sup>1</sup>Academic Medical Center / University of Amsterdam, Amsterdam, Netherlands; <sup>2</sup>University Medical Centre Utrecht, Utrecht, Germany

**OBJECTIVES:** To determine the cost utility of medical co-prescription of heroin compared with methadone maintenance treatment for chronic, treatment resistant heroin addicts. **METHODS:** In a Dutch multicenter study, 430 patients were randomly assigned to a 1-year maintenance treatment with methadone (maximum 150mg per day) or with methadone in combination with inhalable or injectable heroin (maximum 1000 mg per day). Psychosocial treatment was offered throughout. The primary outcome measures were the one-year costs from a societal perspective and the number of quality adjusted life years (QALYs) based on responses to the EQ-5D at baseline and at various times during the treatment period. The incremental costs per QALY ratio was calculated along with its 95% bootstrapped confidence interval. **RESULTS:** Co-prescription of heroin generated 0.058 (95% CI: 0.017–0.100) more QALYs on average than treatment with methadone alone. Mean cost differences between coprescribed heroin treatment and standard methadone treatment resulted from the maintenance programme itself (17,634€ vs. 1412€ euro), law enforcement (8756 v 12,885 euro), damage to victims (9617€ vs. 34,991€), and travel (600€ vs. 146€). The mean total net costs resulting from co-prescribed heroin treatment amounted to minus 12,793 (95% CI: –1049 to –25,169)€. The incremental cost per QALY was minus 220,569 (95% CI: –12,252 to –873,193)€. The cost acceptability of co-prescription of heroin was more than 98.5% for willingness to pay values up to 50,000€ per additional QALY. The probability of heroin co-prescription being cost-effective for patients who were illegally inactive at baseline was below 42%. The results were robust for the exclusion of the initial implementation costs of heroin treatment. **CONCLUSIONS:** Co-prescription of heroin is cost-

effective compared with treatment with methadone alone, even in disregard of the intangible costs of victims of crime.

## PMH18

**ASSESSING THE TOTAL COST OF CARE FOR CEREBRAL PALSY PATIENTS WHO USE BOTULINUM TOXIN TYPE A: AN APPROACH TO CONTROLLING BIAS IN CASE CONTROL STUDIES**

Dickson M<sup>1</sup>, Kozma C<sup>2</sup>, Barron RL<sup>3</sup>

<sup>1</sup>University of South Carolina, Columbia, SC, USA; <sup>2</sup>Independent Outcomes Consultant, West Columbia, SC, USA; <sup>3</sup>Allergan Pharmaceuticals, Irvine, CA, USA

**OBJECTIVES:** The total cost of care (TC) for children with cerebral palsy (CP) who use botulinum toxin type A (BTX-A) was compared to the TC for CP children not using BTX-A. **METHODS:** A nested case control design compared BTX-A users and non-users in the South Carolina Medicaid program from 1995 through 2001. Patients with at least one CP diagnosis between 1996 and 1999 who were age 18 or younger were included. They were followed for one year prior to study enrollment, and 24 months after enrollment. A 1:6 match of BTX-A users to CP patients (non-BTX-A users) was performed using propensity scores from a logistic regression model predicting BTX-A use with demographics, CP severity, analgesia use, inpatient hospitalizations, Chronic Disease Score, CP comorbidities, and pre-period TC. Cases and controls were compared using logistic regression on post-period data to estimate the same model predicting BTX-A use. **RESULTS:** BTX-A users ( $n = 58$ ) were identified and matched to 348 randomly selected non-users. After matching, the cases and controls were not statistically different on any of the model variables used in the matching procedure. Estimation of the final model revealed that only CP severity was significantly related to BTX-A use (diplegia  $p = 0.0107$ , hemiplegia  $p < 0.0001$ , and quadraplegia  $p < 0.001$ ). The Hazard Ratio for these variables revealed the likelihood of BTX-A use relative to the lowest CP severity level (diplegia HR = 5.91, hemiplegia HR = 23.88, and quadraplegia HR = 10.22). While BTX-A is most frequently used in more severe patients, a statistically significant difference in total cost of care was not found ( $p = 0.528$ ). **CONCLUSIONS:** While a greater percentage of CP children treated with BTX-A had more severe diagnoses, their TC was not different from CP children not using BTX-A after controlling for prior-period conditions using propensity scores.

## PMH30

**COST-EFFECTIVENESS ANALYSIS IN THE AUSTRALIAN SETTING OF RISPERIDONE LONG-ACTING INJECTION FOR THE TREATMENT OF PATIENTS WITH SCHIZOPHRENIA WHO ARE PARTIALLY ADHERENT TO THEIR MEDICATION**

Crowley S<sup>1</sup>, Schrover R<sup>1</sup>, Neville AM<sup>2</sup>

<sup>1</sup>Janssen-Cilag Pty Ltd, North Ryde, NSW, Australia; <sup>2</sup>Pretium, Sydney, NSW, Australia

**OBJECTIVES:** To evaluate the cost-effectiveness of the first long-acting atypical anti-psychotic injection (risperidone long-acting injection), compared to a weighted comparator of oral risperidone, oral olanzapine and typical depot injections for the management of patients with schizophrenia, who are partially adherent to their medication in the specialized public psychiatry setting. The perspective of the analysis was the Australian health care system. **METHODS:** A 1-year decision analytic model was developed using probabilistic sensitivity analysis to explore uncertainty. The outcomes used in the cost-effectiveness analysis (CEA) were relapses avoided, deaths due to suicide averted and